

Appendix A Initial Study Checklist

Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Environmental Impact Report/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapter 2.

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

The California Environmental Quality Act requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A mark in the “no impact” column of the checklist reflects this determination. Any needed explanation of that determination is provided at the beginning of Chapter 2.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?		X		
Less than significant impact with mitigation – Refer to Section 2.1.5 Visual/Aesthetics for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway?			X	
Less than significant impact – This section of SR-74, where the proposed project is located, is not a State scenic highway.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
Less than significant impact with mitigation – Refer to Section 2.1.5 Visual/Aesthetics for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X
No impact – The proposed project is located on an existing Highway and no new sources of light or glare are proposed which would adversely affect day or nighttime views in the area.				
AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
No impact – There are no farmlands that would be converted by the proposed project.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
No impact – The proposed project would not alter current land use zoning.				
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
No impact – The proposed project would not require or encourage any changes in land use designations.				
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
No impact – The proposed work conforms with the applicable air quality plans.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
Less than significant impact – The proposed project is located in Orange County (part of the South Coast Air Basin) that is considered non-attainment for State and Federal Standards for three of the six criteria air pollutants. The basin was found in conformance for carbon monoxide on June 11, 2007. There is a potential for increased particulate matter from construction activities. Standard dust control measures for handling material would adequately ensure impacts are less than significant.				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
Less than significant impact – Increases in criteria pollutants would be temporary and very short in duration.				
d) Expose sensitive receptors to substantial pollutant concentration?				X
No impact – There would be no exposure of sensitive receptors to substantial pollutant concentrations with the proposed project.				
e) Create objectionable odors affecting a substantial number of people?				X
No impact – The proposed project would neither directly nor indirectly create objectionable odors.				
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
Less than significant impact – The project will not modify any species habitat.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
Less than significant impact with mitigation – Refer to section 2.3 Biological Environment for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
Less than significant impact with mitigation – Refer to section 2.3 Biological Environment for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
No impact – The project would neither directly nor indirectly interfere with the movement of native species.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
Less than significant impact – The project will not conflict with any local policies or ordinances protecting biological resources.				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	
Less than significant impact – The project will not conflict with the provisions of any adopted Habitat Conservation Plans.				
COMMUNITY RESOURCES - Would the project:				
a) Cause disruption of orderly planned development?		X		
Less than significant impact with mitigation. The project will require minor acquisition of some property Owners will be compensated accordingly for damages at fair market value. Refer to Section 2.1.3.				
b) Be inconsistent with a Coastal Zone Management Plan?				X
No impact – Not applicable as the proposed project is located outside the Coastal Zone.				
c) Affect lifestyles or neighborhood character or stability?				X
No impact – The project will not affect lifestyles or neighborhood character or stability.				
d) Physically divide an established community?			X	
Less than significant impact – There would be minor acquisition of some properties. Refer to Chap. 2.				
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?				X
No impact – No minority, low-income, elderly, disabled, transit-dependent, or other specific interest group have been identified in the project area.				
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?				X
No impact – No businesses or farms are located in the project area.				
g) Affect property values or the local tax base?				X
No impact – The project will not affect property values or the local tax base.				
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines)?				X
No impact – No public libraries, community centers, police departments, fire stations, or post offices are located within 0.8 kilometers (0.5 mile) of the project area.				
i) Result in alterations to waterborne, rail, or air traffic?				X
No impact – The project will not result in alterations to waterborne, rail, or air traffic.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
j) Support large commercial or residential development?			X	
Less than significant impact – The project will support the “Ranch Plan,” a 22,815-acre Planned allowing development of 14,000 dwelling units and 5,200,000 square feet of employment uses in unincorporated south Orange County.				
k) Affect wild or scenic rivers or natural landmarks?				X
No impact – There are no scenic rivers or natural landmarks in the project area.				
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?		X		
Less than significant impact with mitigation – Refer to Sections 2.1.3, 2.1.4, 2.2.5, and 2.2.6 for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
No impact – Within the project area, the Hankey-Rowse House is a historical resource for the purposes of CEQA. However, because the mature trees adjacent to the property would not be affected by the proposed construction, no impact to this resource is expected. Please refer to Section 2.1.6 Cultural Resources for more information.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
No impact – Although an historic archaeological site is located within the project area, it was determined that it did not meet the criteria for significance pursuant to §15064.5 and did not constitute as an historical resource for the purposes of CEQA. Please refer to Section 2.1.6 Cultural Resources for more information.				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
Less than significant impact with mitigation – The project has the potential to adversely impact paleontological resources. With implementation of the mitigation measures proposed, the impact would be less than significant. Please refer to Section 2.2.4 Paleontology for more information.				
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	
Less than significant impact with mitigation – While no human remains have been identified within the project area, the potential exists when ground disturbing activities occur. With implementation of the mitigation measures proposed, the impact could be less than significant. Please refer to Section 2.1.6 Cultural Resources for more information.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
Less than significant impact – No known earthquake faults, including those delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Act (APEFZA) maps, pass through the proposed project site. The closest active fault is Whittier-Elsinore Fault Zone, located approximately 15 km (9 miles). Therefore, ground rupture hazard at the site is considered to be low.				
ii) Strong seismic ground shaking?			X	
Less than significant impact – See response above (i).				
iii) Seismic-related ground failure, including liquefaction?			X	
Less than significant impact – There is a potential for liquefaction at the proposed project site. With implementation of the mitigation measures, as discussed in Section 2.3.3, impacts would be less than significant.				
iv) Landslides?			X	
Less than significant impact – The overall potential for landslides within the proposed project is low.				
b) Result in substantial soil erosion or the loss of topsoil?			X	
Less than significant – Substantial soil erosion or the loss of topsoil is not expected as a result of the project.				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
No impact – The proposed project is not located on a geological unit or soil that is unstable or would become unstable as a result of the project.				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.				X
No impact – The proposed project is not located on expansive soil.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
No impact – Not applicable.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
No impact – No routine transport, use or disposal of hazardous materials would occur as part of the proposed project.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
No impact – No upset and accident conditions are expected with the proposed project.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?				X
No impact – No such emissions are expected with the proposed project, and no such materials, waste, or substances would be handled.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
No impact – No such sites are located within the proposed project.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
No impact – The proposed project is not located within an airport land use plan or within two miles of a public airport.				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
No impact – There are no known private airstrips within the vicinity of the proposed project.				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
No impacts – Refer to section 2.1.4 Traffic and Transportation for proposed avoidance measures, that when incorporated with the proposed project, would ensure no impacts occur to emergency response plans.				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
No impact – The proposed project would not result in increased exposure to these risks.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X
No impact – Conformance to the NPDES Storm Water Permit and BMP's would ensure that the project would not violate water quality standards or waste discharge requirements.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
No impact – Not applicable.				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		X		
Less than significant impact with mitigation – Refer to section 2.2.2 Water Quality and Storm water Runoff for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
Less than significant impact with mitigation – Refer to section 2.2.2 Water Quality and Storm water Runoff for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				X
No impact – Existing drainage facilities would be replaced/upgraded.				
f) Otherwise substantially degrade water quality?		X		
Less than significant impact with mitigation – Refer to section 2.2.2 Water Quality and Storm water Runoff for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.				
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
No impact – Not applicable.				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
No impact – Not applicable.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
No impact – The proposed project would not introduce any new risks associated with flooding.				
j) Inundation by seiche, tsunami, or mudflow?				X
No impact – The proposed project would not increase the risk of inundation by seiche, tsunami, or mudflow.				
LAND USE AND PLANNING - Would the project:				
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
No impact – The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.				
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
No impact – The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan				
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
No impact – Not applicable.				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
No impact – Not applicable.				
NOISE - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
Less than significant impact – There would be a temporary increase in ambient noise levels due to construction equipment and construction activities. The project would not generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Refer to Section 2.2.6.				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
Less than significant impact – There would be temporary exposure of persons to groundborne vibration or groundborne noise. The proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Refer to Section 2.2.6.				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
No impact – There would not be a permanent increase in ambient noise levels without the proposed project.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
Less than significant impact – There would not be a substantial temporary or periodic increase in ambient noise level in the project vicinity above levels existing without the project.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
No impact – Not applicable.				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
No impact – Not applicable.				
POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
				X
No impact – The project proposes to enhance capacity by widening an existing State highway.				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
No impact – The project would not displace substantial numbers of existing housing.				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
No impact – The project will not displace any homes and would not necessitate replacing housing elsewhere.				
PUBLIC SERVICES - Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
Less than significant impact – Refer to Section 2.1.3, Community Impacts for proposed mitigation measures, that would ensure impacts are less than significant.				
ii. Police protection?			X	
Less than significant impact – Refer to Section 2.1.3, Community Impacts for proposed mitigation measures, that would ensure impacts are less than significant.				
iii. Schools?			X	
Less than significant impact – Refer to Section 2.1.3, Community Impacts for proposed mitigation measures, that would ensure impacts are less than significant.				
iv. Parks?			X	
Less than significant impact – Refer to Section 2.1.3, Community Impacts for proposed mitigation measures, that would ensure impacts are less than significant.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
v. Other public facilities?			X	
Less than significant impact – Refer Section 2.1.3, Community Impacts for proposed mitigation measures, that would ensure impacts are less than significant.				
RECREATION -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
No impact – The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities. Access to all parks and recreational facilities in the project vicinity would not change as a result of the proposed project.				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
No impact – The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities.				
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
No impact – The project in itself is a capacity enhancing project and would not induce growth.				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
No impact – The project will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
No impact – Not applicable.				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
No impact – The proposed project would not increase any hazards due to design features or incompatible uses. The appropriate highway safety design guidelines would be used throughout the project design process.				
e) Result in inadequate emergency access?				X
No impact – The project is capacity enhancing project and would result in increased emergency access.				
f) Result in inadequate parking capacity?				X
No impact – Not applicable as there are no parking facilities within the proposed project.				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
No impact – The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation.				
UTILITY AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
No impact – Not applicable.				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
No impact – Not applicable.				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
No impact – Drainage facilities within the proposed project would be expanded, but the construction would not cause significant environmental effects.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
No impact – Not applicable.				
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
No impact – Not applicable.				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
No Impact – Not applicable.				
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
No impact – Not applicable.				

MANDATORY FINDINGS OF SIGNIFICANCE -										
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?										
				X						
Less than significant impact with mitigation – The proposed project would not significantly degrade the quality of the environment or cause significant reductions in any native or sensitive habitats or species populations in the project area. All potential impacts that have not been avoided with special measures are localized and mitigated to a level where significant impacts would not result.										
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?										
				X						
Less than significant with mitigation – Refer to Section 2.4, Cumulative Impacts for proposed mitigation measures, that when incorporated with the proposed project, would ensure impacts are less than significant.										
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?										
								X		
No impact – The proposed project would not have direct or indirect, substantial adverse effects on human beings.										